

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addease COMMISSIONER FOR PATENTS PO Box 1430 Alexandria, Virginia 22313-1450 www.wopto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,542	06/29/2007	Girij Pal Singh	11336.1021USWO	6161
5283S 7590 09/04/2009 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902			EXAMINER	
			SHIAO, REI TSANG	
			ART UNIT	PAPER NUMBER
			1626	
			MAIL DATE	DELIVERY MODE
			09/04/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/586,542 SINGH ET AL. Office Action Summary Examiner Art Unit REI-TSANG SHIAO 1626 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 11 March 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) 3-12 is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1 and 2 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 19 July 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

Application/Control Number: 10/586,542 Page 2

Art Unit: 1626

#### DETAILED ACTION

1. This application claims benefit of the foreign application:

INDIA 56/MUM/2004 with a filing date 01/19/2004.

2. Claims 1-12 are pending in the application.

### Information Disclosure Statement

 Applicant's Information Disclosure Statement filed on July 19, 2006 has been considered. Please refer to Applicant's copy of the 1449 submitted herein.

## Responses to Election/Restriction

4. Applicant's election with traverse of election of Group I claims 1-2, in the reply filed on March 11, 2009 is acknowledged. The traversal is on the grounds that applicants note that claims 3-6 and 12 are directed to products, rather than processes as noted in the restriction requirement. This is found not persuasive, and the reasons are given infra.

Claims 1-12 are pending in the application. The scope of the invention of the elected subject matter is as follows.

Claims 1-2 are drawn to processes of making Ramipri (I) thereof.

The claims 1-12 herein lack unity of invention under PCT rule 13.1 and 13.2 since the compounds defined in the claims lack a significant structural element qualifying as the special technical feature that defines a contribution over the prior art, see Teetz et al. US 5.061,722 or Wang et al. US 6.407,262. Teetz et al. disclose a

Art Unit: 1626

similar Ramipril compounds, see column 14. Wang et al. disclose a process of purifying a compound of formula (1) (i.e., Ramipril(I)) using C<sub>2</sub>-C<sub>10</sub> ether solvent, see columns 4-

- 8. Accordingly, unity of invention is considered to be lacking and restriction of the invention in accordance with the rules of unity of invention is considered to be proper. Furthermore, even if unity of invention under 37 CFR 1.475(a) is not lacking, which it is lacking, under 37 CFR 1.475(b) a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations:
  - (1) A product and a process specially adapted for the manufacture of said product, or
  - (2) A product and a process of use of said product; or
  - (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
  - (4) A process and an apparatus or means specifically designed for carrying out the said process; or
  - (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

And, according to 37 CFR 1.475(c)

if an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b), unity of invention might not be present.

However, it is noted that unity of invention is considered lacking under 37 CFR 1.475(a) and (b). Therefore, since the claims are drawn to more than a product, and according to 37 CFR 1.475 (e)

the determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

The claims lack unity of invention and should be limited to only a product, or a process for the preparation, or a use of the said product. In the instant case, Groups I-XII are drawn to various products, processes of making, and the final products do not contain a common technical feature or structure, and do not define a contribution over the prior art, i.e., similar Ramipri compounds of Teetz et al. and Wang et al. '262 processes. Additionally, It is noted that Group I of claims 1-2 (i.e., drawn to a process of making Ramipril(II)) and Group II of claims 3-6 (i.e., drawn to a product monohydrate of Ramipril(II)) are distinct inventions. Moreover, the examiner must perform a commercial database search on the subject matter of each group in addition to a paper search, which is quite burdensome to the examiner.

Claims 1-2 are prosecuted in the case. Claims 3-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

The requirement is still deemed proper and is therefor made FINAL.

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made. Application/Control Number: 10/586,542

Art Unit: 1626

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. US 6,407,262.

Applicants claim a process for making a compound Ramipril (I) using impure Ramipril and an organic solvent selected from nitromethane, dimetthoxyethane, diethoxymethane or 2,2-dimethoxy propane (i.e., ether solvent), see claim 1.

Application/Control Number: 10/586,542

Art Unit: 1626

## Determination of the scope and content of the prior art (MPEP §2141.01)

Wang et al. '262 disclose a process making compound of formula (1) (i.e., Ramipril (I)) using a mixture of compound of formula (1) and (2) (i.e., impure Ramipril) and an organic solvent selected from  $C_2$ - $C_4$  nitrile solvent or  $C_3$ - $C_{10}$  ether solvent (i.e., dimethoxymethane, diethyl ether), see lines 50-67 in column 4, and lines 38-40 in column 7.

# <u>Determination of the difference between the prior art and the claims (MPEP §2141.02)</u>

The difference between the instant claims and Wang et al. '262 is that the solvent of Wang et al. '262 is selected from  $C_2$ - $C_4$  nitrile solvent or  $C_3$ - $C_{10}$  ether solvent (i.e., dimethoxymethane, diethyl ether), while the instant claims represent  $C_3$ - $C_{10}$  ether solvent (i.e., dimethoxyethane, diethoxymethane or 2,2-dimethoxy propane). Wang et al. '262 processes overlap with the instant invention.

# Finding of prima facie obviousness-rational and motivation (MPEP §2142-2143)

One having ordinary skill in the art would find the instant claims 1-2 prima facie obvious **because** one would be motivated to employ the processes of Wang et al. '262 to obtain the instant processes, wherein ether solvent is selected from dimetthoxyethane, diethoxymethane or 2,2-dimethoxy propane. Dependent claim 2 is also rejected along with claim 1 under 35 U.S.C. 103(a).

Art Unit: 1626

The motivation to obtain the claimed processes derives from Wang et al. '262 known processes would possess similar yields to that which is claimed in the reference.

# Claim Objections

 Claim 1 objected to because of the following informalities: i.e., no chemical formula of Ramipril(I). Appropriate correction is required.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rei-tsang Shiao whose telephone number is (571) 272-0707. The examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number: 10/586,542 Page 8

Art Unit: 1626

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/REI-TSANG SHIAO /

Rei-tsang Shiao, Ph.D. Primary Patent Examiner Art Unit 1626

August 31, 2009